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<110> Bennett, Robert P.

<120> Methods and Compositions for the Production, Identification and Purification of Fusion Proteins

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<151> 2002-07-08

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<151> 2002-07-19

<150> 60/417,172

<151> 2002-10-10

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<212> PRT  
<213> *Klebsiella pneumoniae*

<400> 6

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Val Leu Ala Ser Glu Gly Gln Thr Val Ala Ala Gly Glu Val Leu Leu  
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Ile Leu Glu Ala Met Lys Met Glu Thr Glu Ile Arg Ala Ala Gln Ala  
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Gly Thr Val Arg Gly Ile Ala Val Lys Ala Gly Asp Ala Val Ala Val  
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Gly Asp Thr Leu Met Thr Leu Ala  
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<210> 7

<211> 115

<212> PRT

<213> Mus musculus

<400> 7

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20 25 30

Gln Ala Met Lys Glu Met His Phe His Pro Lys Ala Leu Lys Asp Val  
35 40 45

Lys Gly Gln Ile Gly Ala Pro Met Pro Gly Lys Val Ile Asp Ile Lys  
50 55 60

Val Ala Ala Gly Asp Lys Val Ala Lys Gly Gln Pro Leu Cys Val Leu  
65 70 75 80

Ser Ala Met Lys Met Glu Thr Val Val Thr Ser Pro Met Glu Gly Thr  
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Ile Arg Lys Val His Val Thr Lys Asp Met Thr Leu Glu Gly Asp Asp  
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Leu Ile Leu  
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<210> 8

<211> 123  
 <212> PRT  
 <213> Propionibacterium shermanii

<400> 8

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 35 40 45

Ala Gly Lys Ala Gly Glu Gly Glu Ile Pro Ala Pro Leu Ala Gly Thr  
 50 55 60

Val Ser Lys Ile Leu Val Lys Glu Gly Asp Thr Val Lys Ala Gly Gln  
 65 70 75 80

Thr Val Leu Val Leu Glu Ala Met Lys Met Glu Thr Glu Ile Asn Ala  
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Pro Thr Asp Gly Lys Val Glu Lys Val Leu Val Lys Glu Arg Asp Ala  
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Val Gln Gly Gly Gln Gly Leu Ile Lys Ile Gly  
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 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 9

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 35 40 45

Lys Glu Asn Asp Pro Ser Val Met Arg Ser Pro Ser Ala Gly Lys Leu  
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Ile Gln Tyr Ile Val Glu Asp Gly Gly His Val Phe Ala Gly Gln Cys

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<211> 345  
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<213> *Mus musculus*

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<210> 13  
<211> 369  
<212> DNA  
<213> *Propionibacterium shermanii*

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aagatcggc 369

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<213> *Homo sapiens*

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 <213> Escherichia coli

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<400> 16

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<210> 17  
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 <212> PRT  
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<220>  
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<400> 17

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<210> 18  
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<400> 18

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<210> 19  
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<400> 19

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<220>  
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<220>  
<223> Human c-myc epitope

<400> 22

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<400> 24

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<210> 25  
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<220>  
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gaggatcgag atctcgatcc cgcgaaatta atacgactca ctatagggga attgtgagcg 120  
gataacaatt cccctctaga aataattttg tttaacttta agaaggagat atacat atg 179  
Met

1

ggc gcc ggc acc ccg gtg acc gcc ccg ctg gcg ggc act atc tgg aag 227  
Gly Ala Gly Thr Pro Val Thr Ala Pro Leu Ala Gly Thr Ile Trp Lys  
5 10 15

gtg ctg gcc agc gaa ggc cag acg gtg gcc gca ggc gag gtg ctg ctg 275  
Val Leu Ala Ser Glu Gly Gln Thr Val Ala Ala Gly Glu Val Leu Leu  
20 25 30

att ctg gaa gcc atg aag atg gaa acc gaa atc cgc gcc gcg cag gcc 323  
Ile Leu Glu Ala Met Lys Met Glu Thr Glu Ile Arg Ala Ala Gln Ala  
35 40 45

ggg acc gtg cgc ggt atc gcg gtg aaa gcc ggc gac gcg gtg gcg gtc 371  
Gly Thr Val Arg Gly Ile Ala Val Lys Ala Gly Asp Ala Val Ala Val  
50 55 60 65

ggc gac acc ctg atg acc ctg gcg ggc tct gga tcc gat ctg tac gac 419  
Gly Asp Thr Leu Met Thr Leu Ala Gly Ser Gly Ser Asp Leu Tyr Asp  
70 75 80

gat gac gat aag gga att atc aca agt ttg tac aaa aaa gca ggc tnn 467  
Asp Asp Asp Lys Gly Ile Ile Thr Ser Leu Tyr Lys Lys Ala Gly  
85 90 95

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Lys Val Leu Ala Ser Glu Gly Gln Thr Val Ala Ala Gly Glu Val Leu  
20 25 30

Leu Ile Leu Glu Ala Met Lys Met Glu Thr Glu Ile Arg Ala Ala Gln  
35 40 45

Ala Gly Thr Val Arg Gly Ile Ala Val Lys Ala Gly Asp Ala Val Ala  
50 55 60

Val Gly Asp Thr Leu Met Thr Leu Ala Gly Ser Gly Ser Asp Leu Tyr  
65 70 75 80

Asp Asp Asp Asp Lys Gly Ile Ile Thr Ser Leu Tyr Lys Lys Ala Gly  
85 90 95

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 gataacaatt cccctctaga aataattttg tttaacttta agaaggagat atacat atg 179  
 Met  
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 ggc gcc ggc acc ccg gtg acc gcc ccg ctg gcg ggc act atc tgg aag 227  
 Gly Ala Gly Thr Pro Val Thr Ala Pro Leu Ala Gly Thr Ile Trp Lys  
 5 10 15  
 gtg ctg gcc agc gaa ggc cag acg gtg gcc gca ggc gag gtg ctg ctg 275  
 Val Leu Ala Ser Glu Gly Gln Thr Val Ala Ala Gly Glu Val Leu Leu  
 20 25 30  
 att ctg gaa gcc atg aag atg gaa acc gaa atc cgc gcc gcg cag gcc 323  
 Ile Leu Glu Ala Met Lys Met Glu Thr Glu Ile Arg Ala Ala Gln Ala  
 35 40 45  
 ggg acc gtg cgc ggt atc gcg gtg aaa gcc ggc gac gcg gtg gcg gtc 371  
 Gly Thr Val Arg Gly Ile Ala Val Lys Ala Gly Asp Ala Val Ala Val  
 50 55 60 65  
 ggc gac acc ctg atg acc ctg gcg ggc tct gga tcc gat ctg tac gac 419  
 Gly Asp Thr Leu Met Thr Leu Ala Gly Ser Gly Ser Asp Leu Tyr Asp  
 70 75 80  
 gat gac gat aag gga att gat ccc ttc acc 449  
 Asp Asp Asp Lys Gly Ile Asp Pro Phe Thr  
 85 90

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<400> 28

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20 25 30

Leu Ile Leu Glu Ala Met Lys Met Glu Thr Glu Ile Arg Ala Ala Gln  
35 40 45

Ala Gly Thr Val Arg Gly Ile Ala Val Lys Ala Gly Asp Ala Val Ala  
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Val Gly Asp Thr Leu Met Thr Leu Ala Gly Ser Gly Ser Asp Leu Tyr  
65 70 75 80

Asp Asp Asp Asp Lys Gly Ile Asp Pro Phe Thr  
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ggagacccaa gctggctagc gtttaaactt aagcttacc atg ggc gcc ggc acc 174  
Met Gly Ala Gly Thr  
1 5  
ccg gtg acc gcc ccg ctg gcg ggc act atc tgg aag gtg ctg gcc agc 222  
Pro Val Thr Ala Pro Leu Ala Gly Thr Ile Trp Lys Val Leu Ala Ser  
10 15 20  
gaa ggc cag acg gtg gcc gca ggc gag gtg ctg ctg att ctg gaa gcc 270  
Glu Gly Gln Thr Val Ala Ala Gly Glu Val Leu Leu Ile Leu Glu Ala  
25 30 35  
atg aag atg gaa acc gaa atc cgc gcc gcg cag gcc ggg acc gtg cgc 318  
Met Lys Met Glu Thr Glu Ile Arg Ala Ala Gln Ala Gly Thr Val Arg  
40 45 50  
ggg atc gcg gtg aaa gcc ggc gac gcg gtg gcg gtc ggc gac acc ctg 366  
Gly Ile Ala Val Lys Ala Gly Asp Ala Val Ala Val Gly Asp Thr Leu

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Met Thr Leu Ala Gly Ser Gly Ser Asp Leu Tyr Asp Asp Asp Asp Lys					
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gta cat caa aca agt ttg tac aaa aaa gca ggc tnn		450
Val His Gln Thr Ser Leu Tyr Lys Lys Ala Gly		
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Met Gly Ala Gly Thr Pro Val Thr Ala Pro Leu Ala Gly Thr Ile Trp
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Lys Val Leu Ala Ser Glu Gly Gln Thr Val Ala Ala Gly Glu Val Leu
20 25 30

Leu Ile Leu Glu Ala Met Lys Met Glu Thr Glu Ile Arg Ala Ala Gln
35 40 45

Ala Gly Thr Val Arg Gly Ile Ala Val Lys Ala Gly Asp Ala Val Ala
50 55 60

Val Gly Asp Thr Leu Met Thr Leu Ala Gly Ser Gly Ser Asp Leu Tyr
65 70 75 80

Asp Asp Asp Asp Lys Val His Gln Thr Ser Leu Tyr Lys Lys Ala Gly
85 90 95

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ggagacccaa gctggctagc gtttaaactt aagcttacc atg ggc gcc ggc acc 174  
Met Gly Ala Gly Thr  
1 5

ccg gtg acc gcc ccg ctg gcg ggc act atc tgg aag gtg ctg gcc agc 222  
Pro Val Thr Ala Pro Leu Ala Gly Thr Ile Trp Lys Val Leu Ala Ser  
10 15 20

gaa ggc cag acg gtg gcc gca ggc gag gtg ctg ctg att ctg gaa gcc 270  
Glu Gly Gln Thr Val Ala Ala Gly Glu Val Leu Leu Ile Leu Glu Ala  
25 30 35

atg aag atg gaa acc gaa atc cgc gcc gcg cag gcc ggg acc gtg cgc 318  
Met Lys Met Glu Thr Glu Ile Arg Ala Ala Gln Ala Gly Thr Val Arg  
40 45 50

ggt atc gcg gtg aaa gcc ggc gac gcg gtg gcg gtc ggc gac acc ctg 366  
Gly Ile Ala Val Lys Ala Gly Asp Ala Val Ala Val Gly Asp Thr Leu  
55 60 65

atg acc ctg gcg ggc tct gga tcc gat ctg tac gac gat gac gat aag 414  
Met Thr Leu Ala Gly Ser Gly Ser Asp Leu Tyr Asp Asp Asp Lys  
70 75 80 85

gta cct agg atc cag tgt ggt gga att gat ccc ttc acc 453  
Val Pro Arg Ile Gln Cys Gly Gly Ile Asp Pro Phe Thr  
90 95

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Met Gly Ala Gly Thr Pro Val Thr Ala Pro Leu Ala Gly Thr Ile Trp  
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Lys Val Leu Ala Ser Glu Gly Gln Thr Val Ala Ala Gly Glu Val Leu  
20 25 30

Leu Ile Leu Glu Ala Met Lys Met Glu Thr Glu Ile Arg Ala Ala Gln  
35 40 45

Ala Gly Thr Val Arg Gly Ile Ala Val Lys Ala Gly Asp Ala Val Ala  
50 55 60

Val Gly Asp Thr Leu Met Thr Leu Ala Gly Ser Gly Ser Asp Leu Tyr  
65 70 75 80

Asp Asp Asp Asp Lys Val Pro Arg Ile Gln Cys Gly Gly Ile Asp Pro  
85 90 95

Phe Thr

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catatgtggt acgcaagtaa gagtgcctgc gcatgccccca tgtgccccac caagagtttt      180

gcatcccata caagtccccca aagtggagaa ccgaaccaat tcttcgcggg cagaacaaaa      240

gcttctgcac acgtctccac tcgaatttgg agccggccgg cgtgtgcaaa agaggtgaat      300

cgaacgaaag acccgtgtgt aaagccgcgt ttccaaaatg tataaaaccg agagcatctg      360

gccaatgtgc atcagttgtg gtcagcagca aaatcaagtg aatcatctca gtgcaactaa      420

agggggggatc tagcgtttaa acttaagctt acc atg ggc gcc ggc acc ccg gtg      474
                        Met Gly Ala Gly Thr Pro Val
                        1                      5

acc gcc ccg ctg gcg ggc act atc tgg aag gtg ctg gcc agc gaa ggc      522
Thr Ala Pro Leu Ala Gly Thr Ile Trp Lys Val Leu Ala Ser Glu Gly
                        10                      15                      20

cag acg gtg gcc gca ggc gag gtg ctg ctg att ctg gaa gcc atg aag      570
Gln Thr Val Ala Ala Gly Glu Val Leu Leu Ile Leu Glu Ala Met Lys
                        25                      30                      35

atg gaa acc gaa atc cgc gcc gcg cag gcc ggg acc gtg cgc ggt atc      618
Met Glu Thr Glu Ile Arg Ala Ala Gln Ala Gly Thr Val Arg Gly Ile
                        40                      45                      50                      55

gcg gtg aaa gcc ggc gac gcg gtg gcg gtc ggc gac acc ctg atg acc      666
Ala Val Lys Ala Gly Asp Ala Val Ala Val Gly Asp Thr Leu Met Thr
                        60                      65                      70

ctg gcg ggc tct gga tcc gat ctg tac gac gat gac gat aag gta cat      714
Leu Ala Gly Ser Gly Ser Asp Leu Tyr Asp Asp Asp Asp Lys Val His
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caa aca agt ttg tac aaa aaa gca ggc tnn      744

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Gln Thr Ser Leu Tyr Lys Lys Ala Gly  
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<210> 34  
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Lys Val Leu Ala Ser Glu Gly Gln Thr Val Ala Ala Gly Glu Val Leu  
20 25 30

Leu Ile Leu Glu Ala Met Lys Met Glu Thr Glu Ile Arg Ala Ala Gln  
35 40 45

Ala Gly Thr Val Arg Gly Ile Ala Val Lys Ala Gly Asp Ala Val Ala  
50 55 60

Val Gly Asp Thr Leu Met Thr Leu Ala Gly Ser Gly Ser Asp Leu Tyr  
65 70 75 80

Asp Asp Asp Asp Lys Val His Gln Thr Ser Leu Tyr Lys Lys Ala Gly  
85 90 95